

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

1 – 33 (Canceled)

34. (Currently amended) A sterile solution comprising:

disinfectant;

detergent; and

at least about 0.5 % by weight of the solution of organic acid having a pKa of no greater than about 5;

said disinfectant, detergent, and organic acid being present in amounts effective for removing a smear layer from a prepared endodontic surface.

35. (Original) The solution of claim 34 wherein the disinfectant is an antibiotic.

36. (Original) The solution of claim 35 wherein the antibiotic is substantially stable in acidic solution.

37. (Original) The solution of claim 36 wherein the antibiotic is a tetracycline.

38. (Original) The solution of claim 37 wherein the antibiotic is doxycycline.

39. (Original) The solution of claim 34 wherein the detergent is a Food and Drug Administration-approved additive.

40. (Original) The solution of claim 39 wherein the detergent is a sorbitan ester compound.

41. (Original) The solution of claim 40 wherein the detergent is a polysorbate compound.

42. (Original) The solution of claim 41 wherein the polysorbate compound is polysorbate

80.

43. (Original) The solution of claim 34 wherein the organic acid has a pKa between 1.5 and 5.
44. (Original) The solution of claim 43 wherein the organic acid has a pKa between 2 and 5.
45. (Original) The solution of claim 44 wherein the organic acid has a pKa between 2.75 and 3.75.
46. (Original) The solution of claim 45 wherein the organic acid is citric acid.
47. (Original) The solution of claim 34 wherein the disinfectant is present in an amount of from about 1 to 5 percent by weight of the solution.
48. (Original) The solution of claim 34 wherein the disinfectant is present in an amount of from about 2 to 4 percent by weight of the solution.
49. (Original) The solution of claim 34 wherein the disinfectant is present in an amount of about 3 percent by weight of the solution.
50. (Original) The solution of claim 34 wherein the detergent is present in an amount of from about 0.1 to 1.5 percent by weight of the solution.
51. (Original) The solution of claim 34 wherein the detergent is present in an amount of from about 0.25 to 1 percent by weight of the solution.
52. (Original) The solution of claim 34 wherein the detergent is present in an amount of about 0.5 percent by weight of the solution.
53. (Currently Amended) The solution of claim 34 wherein the acid is present in an amount of up to ~~from~~ about 0.5 to 10 percent by weight of the solution.
54. (Original) The solution of claim 34 wherein the acid is present in an amount of from about 3 to 6 percent by weight of the solution.

55. (Currently Amended) The solution of claim 34 wherein the acid is present in an amount of ~~from about 4 to 5 percent by weight of the~~ effective to yield a pH of the solution of less than about 4.

56. (Original) The solution of claim 34 wherein the composition of the solution is about 3% disinfectant, 0.5% detergent, and 4.25% acid by weight.

57. (Original) The solution of claim 34 wherein the solution comprises doxycycline, polysorbate 80, and citric acid.

58. (Original) The solution of claim 57 wherein the composition of the solution is about 3% doxycycline, about 0.5% polysorbate 80, and about 4.25% citric acid by weight.

59. (Canceled)

60. (Previously presented) The solution of claim 34 wherein said amounts are effective for substantially sterilizing said surface.

61. (Currently amended) A sterile solution comprising:

disinfectant;

detergent; and

at least about 0.5 % by weight of the solution of organic acid having a pKa of no greater than about 5;

said disinfectant, detergent, and organic acid being present in amounts effective for removing a smear layer from a prepared orthopaedic surface.

62. (Previously presented) The solution of claim 61 wherein the composition of the solution is about 3% disinfectant, 0.5% detergent, and 4.25% acid by weight.

63. (Previously presented) The solution of claim 61 wherein the solution comprises doxycycline, polysorbate 80, and citric acid.

64. (Previously presented) The solution of claim 63 wherein the composition of the solution is about 3% doxycycline, about 0.5% polysorbate 80, and about 4.25% citric acid by weight.

65. (Previously presented) The solution of claim 61 wherein said amounts are effective for substantially sterilizing said surface.

66. (Currently Amended) A sterile solution comprising:

disinfectant;

detergent; and

at least about 0.5 % by weight of the solution of organic acid having a pKa no greater than about 5;

said disinfectant, detergent, and organic acid being present in amounts effective for removing a smear layer from a prepared tooth surface.

67. (Previously presented) The solution of claim 66 wherein the composition of the solution is about 3% disinfectant, 0.5% detergent, and 4.25% acid by weight.

68. (Previously presented) The solution of claim 66 wherein the solution comprises doxycycline, polysorbate 80, and citric acid.

69. (Previously presented) The solution of claim 68 wherein the composition of the solution is about 3% doxycycline, about 0.5% polysorbate 80, and about 4.25% citric acid by weight.

70. (Previously presented) The solution of claim 66 wherein said amounts are effective for substantially sterilizing said surface.

71. (Currently Amended) A sterile solution comprising:

disinfectant;

detergent; and

at least 0.5% by weight of the solution of organic acid having pKa of no greater than about 5;

said disinfectant, detergent, and organic acid being present in amounts effective for removing a smear layer from a surface prepared for dental reconstruction or restoration or from a prepared periodontal surface.

72. (Previously presented) The solution of claim 71 wherein the composition of the solution is about 3% disinfectant, 0.5% detergent, and 4.25% acid by weight.

73. (Previously presented) The solution of claim 71 wherein the solution comprises doxycycline, polysorbate 80, and citric acid.

74. (Previously presented) The solution of claim 73 wherein the composition of the solution is about 3% doxycycline, about 0.5% polysorbate 80, and about 4.25% citric acid by weight.

75. (Currently Amended) The solution of claim 71 wherein said organic acid is present in an amounts-are effective for adjusting the pH of the solution to about 4 or less substantially sterilizing said surface.

76. (Currently Amended) A sterile solution comprising:

disinfectant;

detergent; and

organic acid;

said disinfectant, detergent, and organic acid being present in amounts effective for removing a smear layer from a surface prepared for dental reconstruction or restoration or from a prepared periodontal surface, the pH of the solution being less than about 4.

77. (Previously presented) The solution of claim 76 wherein the composition of the solution is about 3% disinfectant, 0.5% detergent, and 4.25% acid by weight.

78. (Previously presented) The solution of claim 76 wherein the solution comprises doxycycline, polysorbate 80, and citric acid.

79. (Previously presented) The solution of claim 78 wherein the composition of the solution is about 3% doxycycline, about 0.5% polysorbate 80, and about 4.25% citric acid by weight.

80. (Currently Amended) The solution of claim 76 wherein said organic acid is present in an amounts of at least about 0.5% by weight of the solution and has a pKa of no greater than about 5 ~~are effective for substantially sterilizing said surface.~~